

ABSTRACT

The present invention may be viewed as providing a system for interconnecting a plurality of remote devices to a site controller in an automated monitoring system via a wireless communication network. The automated monitoring system may be 5 configured for monitoring and controlling the plurality of remote devices using a host computer adapted to communicate with the site controller via a communication network. Briefly described, in one embodiment, the system comprises a plurality of transceivers and a plurality of repeaters. Each of the plurality of transceivers have a unique identifier. Furthermore, each of the plurality of transceivers may be 10 configured for communication with one of the plurality of remote devices and configured to receive a sensor data signal from the corresponding remote device and provide a data message over the wireless communication network using a predefined communication protocol. The data message may comprise the unique identifier corresponding to the transceiver sending the message, as well as the sensor data 15 signal. The plurality of repeaters also have unique identifiers. Each of the plurality of repeaters may be disposed in relation to the plurality of transceivers such that each of the plurality of repeaters is in communication with at least one of the plurality of transceivers via the wireless communication network. Furthermore, each of the plurality of repeaters may be configured to receive the data message from the corresponding 20 transceiver and provide an outgoing data message over the wireless communication network using the predefined communication protocol. The outgoing data message may include the data message received from the corresponding transceiver and the corresponding unique identifier for the repeater.

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